# Fire Life Safety (FLS) Survey - Paperwork

Presented by:

Ronald J. Brook, R.S.
Health & FLS Surveyor
Quality Assurance Bureau
DPHHS
MHCA Spring Conference
Bozeman, MT - 3.17.2008

# K50 - Fire Drills, Evacuation and Relocation

Minimum Requirements are found in NFPA 101–19.7.1-3

- Once/quarter/shift, if the drills are failed it may take more drills to achieve compliance
- Month/day/year/time required on the form
  - Be consistent with time all military or all standard
- Day and afternoon drills all parts of the alarm system have to be tested. Paper work should indicate whether the alarms were sounded or not
- Night shift drills may be silent, all parts of the system must be checked within 24 hours of the drill
- Drill requirements apply to all employees

### K50 - Written Fire Safety Plan NFPA 101-19.7.2.2

- Shall Provide The Following:
  - Use of alarms
  - Transmission of alarm to fire department
  - Response to alarms
  - Isolation of fire
  - Evacuation of immediate area
  - Evacuation of smoke compartment
  - Preparation of floors and building for evacuation
  - Extinguishment of fire

### K56 - Sprinkler Service Reports

#### NFPA 101-9.7.1 (NFPA 13)

- Required quarterly on all wet and dry sprinkler systems
- Readings for static and residual pressures
- Dry system trip testing on valves annually
- Full flow tests on dry systems annually
- Antifreeze loops tested annually
- Water pressure drop/low pressure switches tested annually

### K 154 & 155 - Fire Watch

#### NFPA 101-9.6.1.8

- Where a required fire alarm system is out of service for more than 4 hours in a 24hour period:
  - The authority having jurisdiction shall be notified
  - Building shall be evacuated <u>or</u> an approved fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service

# K52 - Fire Alarm & Detection System

NFPA 101-9.6.1

- Must be serviced annually
- Dampers tested during drills
  - Requirement is that all dampers are tested once in four years
- Sensitivity testing on all components of the alarm system
  - Detector sensitivity shall be checked within 1 year after installation and every alternate year thereafter. After the second required calibration test, if sensitivity tests indicate that the detector has remained within its listed and marked sensitivity range (or 4 percent obscuration light gray smoke, if not marked), the length of time between calibration tests shall be permitted to be extended to a maximum of 5 years. (NFPA 72 7-3.2.1)

### K69 - Kitchen Hood Extinguishing System

NFPA 96-9.2.3

- Serviced twice annually by a licensed professional
- Cleaned twice annually
- 40 BC or K-type portable extinguisher is required in the kitchen area.
   A placard identifying the use of the extinguisher as a secondary backup means to the automatic fire suppression system shall be conspicuously placed near each portable fire extinguisher in the cooking area. Class B gas-type portables such as CO2 and Halon shall not be permitted in kitchen cooking areas
- Links must be changed at least annually
- Hood system must be interfaced with the Fire Alarm Control Panel (FACP)
- Fuel Shutoff Upon activation of any fire-extinguishing system for a cooking operation, all sources of fuel and electric power that produce heat to all equipment requiring protection by that system shall automatically shut off
- Bulbs must be in clean condition

## K64 - Portable Fire Extinguishers NFPA 10-4.4

- Serviced by a licensed professional annually
- Every 6 years, stored-pressure fire extinguishers that require a 12-year hydrostatic test shall be emptied and subjected to the applicable maintenance procedures.
  - Exception: Non-rechargeable fire extinguishers shall not be hydrostatically tested but shall be removed from service at a maximum interval of 12 years from the date of manufacture
- Monthly checks by maintenance staff with month and day indicated on the tag for each month after the annual service date
  - Maintenance log identifying the location of all portable extinguishers
- Portable fire extinguishers shall be maintained in a fully charged and operable condition, and kept in their designated places at all times when they are not being used

- Fire extinguishers shall be conspicuously located where they will be readily accessible and immediately available in the event of fire Preferably they shall be located along normal paths of travel, including exits from areas
- Cabinets housing fire extinguishers shall not be locked. (Exception) Where fire extinguishers are subject to malicious use, locked cabinets shall be permitted to be used, provided they include means of emergency access

- Fire extinguishers shall not be obstructed or obscured from view. (Exception) In large rooms, and in certain locations where visual obstruction cannot be completely avoided, means shall be provided to indicate the location
- Portable fire extinguishers other than wheeled types shall be securely installed on the hanger or in the bracket supplied or placed in cabinets or wall recesses. The hanger or bracket shall be securely and properly anchored to the mounting surface in accordance with the manufacturer's instructions

- Fire extinguishers installed under conditions where they are subject to physical damage, (e.g., from impact, vibration, the environment) shall be adequately protected
- Fire extinguishers having a gross weight not exceeding 40 lb (18.14 kg) shall be installed so that the top of the fire extinguisher is not more than 5 ft (1.53 m) above the floor. Fire extinguishers having a gross weight greater than 40 lb (18.14 kg) (except wheeled types) shall be so installed that the top of the fire extinguisher is not more than 31/2 ft (1.07 m) above the floor. In no case shall the clearance between the bottom of the fire extinguisher and the floor be less than 4 in. (10.2 cm)

- Extinguisher operating instructions shall be located on the front of the extinguisher and be clearly visible. Hazardous materials identification systems (HMIS) labels, six-year maintenance labels, hydro test labels, or other labels shall not be located or placed on the front of the extinguisher
- Fire extinguishers mounted in cabinets or wall recesses shall be placed so that the fire extinguisher operating instructions face outward. The location of such fire extinguishers shall be marked conspicuously

### K144 - Maintenance of Alternate Power Source – NFPA 99-4.4.1.1

- The generator set shall supply back-up power service within 10 seconds of activation
- Generator shall be tested 12 times a year with testing intervals between no less than 20 days or exceeding 40 days
- Test under load conditions (30 minutes minimum) shall include a complete simulated cold start and appropriate automatic and manual transfer of all essential electrical system loads
- A written record of inspection, performance, exercising period, and repairs shall be maintained and available for inspection by the authority having jurisdiction (AHJ)
- Battery back-up lighting is required at the generator set location and the transfer switch location, monthly (15 seconds) and annual (90 minutes) testing of batteries are required

#### STATE OF MONTANA – DPHHS

| Shift Jan - March April - June July - Sept Oct - Dec Jan - Ma  O - silent alarm; x - alarm with drill; * - alarm sounded later in day Minimum staff on night shift (FSES)  Sprinkler Service Reports  Date Readings Service Priormed by Wet, Dry Antifreeze Pipe Schedule Hydraulic System Min. Water PSI Size of main riser Dry System last trip test Dry System last full flow test |
|---|
| Shift Jan – March April – June July – Sept Oct – Dec Jan – Ma  O – silent alarm; x – alarm with drill; * - alarm sounded later in day  Minimum staff on night shift (FSES) –  Sprinkler Service Reports  Date   |
| O – silent alarm; x – alarm with drill; * - alarm sounded later in day Minimum staff on night shift (FSES)  Sprinkler Service Reports  Date Readings Service Pripe Schedule Hydraulic System Min. Water PSI Size of main riser  |
| Minimum staff on night shift (FSES)   |
| Sprinkler Service Reports  Date   |
| Date  |
| Date  |
| Service performed by Wet, Dry Antifreeze Pipe Schedule Hydraulic System Min. Water PSI Size of main riser   |
| Service performed by Wet, Dry Antifreeze<br>Pipe Schedule Hydraulic System Min. Water PSI Size of main riser  |
| Pipe Schedule Hydraulic System Min. Water PSI Size of main riser  |
| Pipe Schedule Hydraulic System Min. Water PSI Size of main riser  |
|   |
| Dry System last trip test Dry System last full flow test  |
|   |
|   |
| Fire Alarm and Detection System   |
| Serviced by: Monitored by:  |
| Date of annual service  |
| Sensitivity tests   |
| Dampers tested during drills:   |
|   |
| Kitchen Hood Extinguishing System   |
| Serviced by: 40 BC or K Extinguisher  |
| Service dates Links Changed on  |
| Bulb sprinklers in clean condition Hood system interfaced to FACP   |
|   |
|   |
| Portable Fire Extinguishers   |
| Serviced by: Date: Last Hydro-tested  |
| Monthly checks denoted by dated and initials on tag: yes/no or Maintenance log: yes/no  |
|   |
| Emorgonov Congretor Deports   |
| Make and Model: Fuel Source:  |
| Face plate rating (KVA, KW, Amps)   |
| Tests documented _weekly visuals yes/no; monthly loads: yes/no  |
| Remote Annunciator: yes/no  |